

## MASTASTAPH™ Validation

Mast product name	MASTASTAPH
Mast product code	RST 101

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## Section 1 - General description of the product and intended use

Product name	MASTASTAPH <sup>™</sup>		
Catalogue number:	RST 101		
Manufacturer:	Mast Group Ltd., Mast House, Derby Road, Bootle, Liverpool, Merseyside. L20		
	1EA. UK.		
Product description:	The MASTASTAPH™ kit contains the following components:		
	1. Latex Reagent. Ready to use. 2 x 3ml of latex particles coated with human		
	fibrinogen and IgG in phosphate buffered saline, pH 6.8. Contains less than 0.1%		
	sodium azide as preservative.		
	2. 120 single use disposable mixing sticks.		
	3. 30 disposable 4-place test cards.		
	4. Instructions leaflet.		
Intended purpose:	The MASTASTAPH™ kit is a rapid slide agglutination test for the identification of		
	Staphylococci that produce clumping factor and/or protein A.		
Intended user:	Trained laboratory technical staff.		



## Section 2 – Quality Control acceptance criteria

Method:	Quality Control tests performed according to the method given in Mast			
	Instructions for use on the stated organisms.			
Results criteria:	Positive	Aggregation of latex particles with a clear background		
	Negative	Milky appearance without any visible aggregation of the latex		
		particles		
	Staphylococcus aureus Normal Saline solution			
	ATCC® 25923			
	Aggregation of latex particles		Milky appearance without any	
	with a clear background		visible aggregation of the latex	
			particles	

Note: ATCC® is a trademark of the American Type Culture Collection, Manassas, Virginia, USA.

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### Section 3 - Results of stability and transit studies

### **Stability Protocol**

Long term stability tests are undertaken to ensure that the performance of the product remains within specified tolerances, under recommended storage conditions, over the period between manufacture and stated expiry date. Studies are based on "Real Time" testing of retained product samples of the same material formulation, container and closure system as utilised in products supplied to the customer.

Performance tests were carried out as listed below to establish product stability when stored at 2°C to 8°C. Prior to testing each component was allowed to warm up to room temperature and tested in the approved manner.

MASTASTAPH™ stability data from a representative batch

Time from Manufacture (months)	Positive Control	Negative Control	Within Specification
0	+	-	Yes
12	+	-	Yes

### **Transit studies**

Mast Group Limited has undertaken transit validation studies on representative samples of Mast Latex products to establish the effect exposure to adverse, or extreme, temperature has on this product range.

Based on our knowledge of transport conditions that these products may be exposed to, packs of Mast Latex products were subjected to controlled temperature extremes ranging from minus 20°C to 60°C for a period of 14 days (2 weeks) and then tested according to relevant standard quality control tests to determine the effect of simulated transit on their quality.

Over the test period it was established that none of the products tested showed alteration in performance criteria following exposure to ambient temperatures in the range of 20-23.5°C. Thus this data supports our continued use of ambient temperature shipment of Mast Latex products intended for subsequent storage at cold room temperature for up to 1 week without the necessity for employment of insulated temperate shipping containers and associated temperature indicators.



## **External Evaluations**

Third Party Study A

	Number		
	Positive	Negative	Total
Positive	15	0	15
Negative	1	134	135

Sensitivity = 100% Specificity = 99.3%

Third Party Study B

	Number		
	Positive	Total	
Positive	22	0	22
Negative	1	55	56

Sensitivity = 100% Specificity = 98.2%